

WHAT IS CLAIMED IS:

1 1. A method of managing a computer database, comprising the steps of:
 2 importing data into a database residing on a computer system;
 3 constructing a schema object to represent a schema of the database; and
 4 manipulating the database using an aggregate classifier based on the schema
 5 object.

1 2. The method of Claim 1 wherein said constructing step includes the steps of:
 2 defining a plurality of classifier definitions corresponding to the schema of the
 3 database; and
 4 mapping the classifier definitions to columns and tables in the database.

1 3. The method of Claim 2 wherein said defining step defines a "property"
 2 classifier which interacts with a single column on a single table in the database.

1 4. The method of Claim 3 wherein said defining step further defines an
 2 "object" classifier which contains one or more of the "property" classifiers.

1 5. The method of Claim 3 wherein said defining step defines a "split-object"
 2 classifier which makes more than one "object" classifier appear as a single classifier.

1 6. The method of Claim 5 wherein said defining step further defines a "join"
 2 classifier which identifies how multiple "object" classifiers database objects are
 3 linked in a "split-object" classifier.

1 7. The method of Claim 5 wherein said defining step defines a "mapped
 2 property" classifier as a special form of the "split-object" classifier to manage data
 3 stored in a table of the database which serves as an index to another database table.

1 8. The method of Claim 2 wherein said defining step defines a parameterized
 2 classifier which is a template for classifiers that are instantiated when associated
 3 parameters are provided.

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1 9. The method of Claim 1 further comprising the steps of:
 2 modifying the schema of the database;
 3 constructing a second schema object for the modified database; and
 4 manipulating the modified database using the second schema object.

1 10. The method of Claim 9 wherein said step of constructing the second
 2 schema object includes the step of re-writing classification definitions stored on the
 3 computer system.

1 11. The method of Claim 1 wherein said constructing step includes the step of
 2 writing classification definitions stored on the computer system using a field-based
 3 language.

1 12. The method of Claim 11 wherein said writing step uses XML.

1 13. The method of Claim 1 wherein said constructing step includes the step of
 2 writing classification definitions stored on the computer system.

1 14. The method of Claim 13 wherein said importing step parses an import file
 2 to import the data.

1 15. The method of Claim 13 wherein said manipulating step includes the step
 2 of an application, residing on the computer system, interacting with a composite
 3 object included in the classification definitions.

1 16. The method of Claim 1 wherein said manipulating step includes the step of
 2 generating a SQL SELECT query using the query generator.

1 17. The method of Claim 1 wherein said manipulating step includes the step of
 2 generating a SQL INSERT query using the query generator.

1 18. The method of Claim 1 wherein said manipulating step includes the step of
 2 generating a SQL UPDATE query using the query generator.

1 19. The method of Claim 1 wherein said manipulating step includes the step
2 of generating a SQL DELETE query using the query generator.

1 20. The method of Claim 16 wherein said generating step includes the step of
2 an aggregate classifier interrogating the schema object to determine how different
3 classifiers correspond to columns and tables in the database.

1 21. A computer system comprising:
2 memory means storing a database, and storing program instructions adapted to
3 construct a schema object to represent a schema of the database, and
4 manipulate the database using an aggregate classifier based on the
5 schema object; and
6 means for processing the program instructions.

1 22. The computer system of Claim 21 wherein the program instructions define
2 a plurality of classifiers corresponding to the schema of the database, and map the
3 classifiers to tables in the database.

1 23. The computer system of Claim 20 wherein the program instructions further
2 define a "property" classifier which interacts with a single column on a single table in
3 the database.

1 24. The computer system of Claim 23 wherein the program instructions further
2 define an "object" classifier which contains one or more of the "property" classifiers.

1 25. The computer system of Claim 22 wherein the program instructions further
2 define a "split-object" classifier which makes more than one "object" classifier appear
3 as a single classifier.

1 26. The computer system of Claim 25 wherein the program instructions further
2 define a "join" classifier which identifies how multiple "object" classifiers are linked
3 in a "split-object" classifier.

1 35. The method of Claim 21 wherein said manipulating step includes the step
2 of generating a SQL DELETE query using the query generator.

1 50. The computer program product of Claim 49 wherein the program
2 instructions further direct an aggregate classifier to interrogate the schema object to
3 determine locations of different classifiers in the database.

- 1 51. The computer program product of Claim 38 wherein the program
- 2 instructions construct a composite object to interact with an application program
- 3 residing on the computer system.

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